

REMARKS/ARGUMENTS

Favorable reconsideration of the present application is respectfully requested.

Claims 1-14 remain active in the application.

Claims 7 and 14 have been amended to provide antecedent basis for the “torque converter.” The rejection under 35 U.S.C. § 112, is therefore believed to be moot.

Briefly, the claimed invention is directed to a method and apparatus for executing neutral control in an automatic transmission. In order to extend the time during which the neutral control is executed, when the detected road gradient is equal to or less than a predetermined value and the conditions for executing neutral control are fulfilled, the command for releasing the input clutch to initiate the neutral control is first outputted, after which a detected road gradient is compared to a predetermined value to determine whether the commanded output is to be canceled. For example, referring to the non-limiting embodiment of Figure 3, a neutral control command to release the clutch pressure for the input clutch C1 is outputted at step S120 based on the fulfillment of conditions for starting neutral control determined in step S110. Subsequently, the detected road gradient is compared to a predetermined value at step S130. The command to release the input clutch is canceled at step S160 if the road gradient is greater than a predetermined value.

The feature of comparing the detected road gradient and the predetermined value after the command to release the input clutch has been outputted, and canceling the output of the command value if the road gradient is greater than a predetermined value, is recited in all of the claims. Claims 1, 2, 5-9 and 12-14 were rejected under the 35 U.S.C. § 102 as being anticipated by U.S. patent 6,454,766 (Saito et al.). However, it is respectfully submitted that the claims clearly define over this reference because the comparison of a detected road gradient and a predetermined value is performed before, and not after, a command to alter the clutches to initiate neutral control in Saito et al.

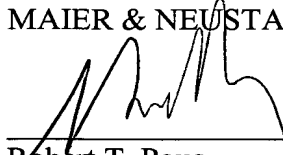
Saito et al discloses an automatic transmission provided with neutral control, which is referred to as "halt control" and is executed at step S4 in Figure 2. The halt control is further described in Figure 6 wherein the detected road gradient is first compared to a predetermined value at step S47, after which the halt mode neutral control is initiated at step S50 by reducing pressure to a clutch 22 or 23 (column 9, lines 28-30). Thus, the comparison of the detected road gradient to a predetermined value is performed at step S47 before --not after-- a command to initiate neutral control has been output at step S50. The order of steps in Saito et al is opposite to that in the claims.

Applicants note the examiner's reliance on step S51 in Fig. 6 of Saito et al, which step terminates a halt mode neutral control based upon an upward slope detected at step S47. However, step S51 fails to teach the inventive feature of the claims since it is initiated based on the comparison of step S47 which is made before, and not after, the initiation of the halt mode neutral control at step S50. Accordingly, the claims define over Saito et al.

Applicants believe that the present application is in a condition for allowance and respectfully solicit an early Notice of Allowability.

Respectfully submitted,

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